

ABSTRACT

The present invention provides a wireless transmission system in which it is possible to exert a maximum path diversity effect even if the maximum number of effective branches is limited to a small number. A transmission timing control section(23) determines a transmission start timing to be a timing obtained by delaying a reference timing by a predetermined delay amount. A modulation section(21) modulates a signal by a modulation scheme such that an anti-multipath property is exerted when the signal is demodulated on a receiver side, and transmits the modulated signal at the transmission start timing. In a receiving station(12), a demodulation section(33) demodulates the receive signal to obtain receive data. The predetermined delay amount is such that signals are received at the receiving station(12) at a plurality of signal-receiving timings, and the number of signal-receiving timings is less than or equal to a predetermined maximum number of effective branches, a difference between the signal-receiving timings is greater than or equal to a predetermined delay resolution and is less than or equal to a predetermined maximum delay.